July 24, 2001

Mark Griffin
Nishikawa Standard Company
324 Morrow Street
Topeka, Indiana 46571

Re: 087-14331
First Minor Source Modification to
Part 70 No.: T 087-7181-00031

Dear Mr. Griffin:

Nishikawa Standard Company was issued a Part 70 permit on April 12, 2001 for a source that manufactures automotive rubber weatherstripping products An application to modify the source was received on April 7, 2001. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

(a) One (1) SDM ED extrusion line, identified as emission unit X-033, with a maximum capacity of 1,289 pounds of rubber per hour, equipped with two (2) natural gas-fired microwave curing ovens, each has a heat input capacity of 0.143 million British Thermal Units per hour (mmBtu/hr), exhausting to vents PEV-E1 and PEV-E2; two (2) natural gas-fired hot air rubber curing ovens, each has a heat input capacity of 0.850 mmBtu/hr exhausting to stacks PEF-E1 and PEF-E2; and one wire metal system consisting of two (2) natural gas-fired burners, each has a heat input capacity of 0.375 mmBtu/hr and exhausting to stack PEF-E6.

(b) One (1) spray line identified as X-034, equipped with six (6) High Volume Low Pressure (HVLP) spray guns, using dry filters to control PM overspray emissions, exhausting to stack PEF-E3, and two (2) natural gas-fired coating cure ovens, each has a heat input capacity of 0.340 mmBtu/hr exhausting to stacks PEF-E4 and PEF-E5.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction and operation when the minor source modification has been issued. Operating conditions shall be incorporated into the Part 70 operating permit as a minor permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Aida De Guzman or extension (3-4972), or dial (317) 233-4972.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
APD
cc: File - LaGrange County
LaGrange County Health Department
Northern Regional Office
Air Compliance Section Inspector - Doyle Houser
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 MINOR SOURCE MODIFICATION
OFFICE OF AIR QUALITY

Nishikawa Standard Company
324 Morrow Street
Topeka, Indiana 46571

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

First Minor Source Modification: 087-14331	
Issued by: Paul Dubenetzky, Chief Permit Branch Office of Air Quality	Issuance Date: July 24, 2001

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(a) One (1) SDM ED extrusion line, identified as emission unit X-033, with a maximum capacity of 1,289 pounds of rubber per hour, equipped with two (2) natural gas-fired microwave curing ovens, each has a heat input capacity of 0.143 million British Thermal Units per hour (mmBtu/hr), exhausting to vents PEV-E1 and PEV-E2; two (2) natural gas-fired hot air rubber curing ovens, each has a heat input capacity of 0.850 mmBtu/hr exhausting to stacks PEF-E1 and PEF-E2; and one wire metal system consisting of two (2) natural gas-fired burners, each has a heat input capacity of 0.375 mmBtu/hr and exhausting to stack PEF-E6.

(b) One (1) spray line identified as X-034, equipped with six (6) High Volume Low Pressure (HVLP) spray guns, using dry filters to control PM overspray emissions, exhausting to stack PEF-E3, and two (2) natural gas-fired coating cure ovens, each has a heat input capacity of 0.340 mmBtu/hr exhausting to stacks PEF-E4 and PEF-E5.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Any change or modification which may increase the VOC potential emissions from spray line, X-034 to 25 tons per year or greater shall be subject to 326 IAC 8-1-6 (General Reduction Requirements) and must be approved by the Office of Air Quality (OAQ) before such change may occur.

D.5.2Particulate Matter (PM) [326 IAC 6-3-2]

(1) Pursuant to 326 IAC 6-3, the PM emissions from the extruder line, X-033 shall be limited to 3.05 pounds per hour at process weight rate of 1,289 pounds per hour (0.64 tons/hour). This limit shall be determined using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

(2) Spray line, X-034 PM overspray emissions shall be limited using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

D.5.3Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan in accordance with Section B - Preventive Maintenance Plan of the Part 70 permit, is required for these facilities and the control device.

Compliance Determination Requirements

D.5.4Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee is not required by this permit to perform compliance tests. However, the Commissioner reserves the right to invoke its authority under 326 IAC 2-1.1-11 to require stack testing, monitoring or reporting at any time to assure compliance with all applicable requirements. If testing is require by IDEM, compliance with Condition D.5.1 and D.5.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing of the Part 70 permit.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.5Particulate Matter (PM)

The dry filters shall be in operation at all times Spray Line, X-034 is in operation, in order to comply with the limit in Condition D.5.2.

D.5.6Monitoring

(a)Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from Spray Line, X-034 stack PEF-E3 while the spray line is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b)Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c)Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.7Record Keeping Requirements

(a)To document compliance with Conditions D.5.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.5.1.

(1)The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2)The cleanup solvent usage for each month;

(3)The total VOC usage for each month; and

(4)The weight of VOCs emitted for each compliance period.

(b)To document compliance with Condition D.5.2 the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c)All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of the Part 70 permit.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Minor Source Modification to a Part 70 Source

Source Background and Description

Source Name:	Nishikawa Standard Company
Source Location:	324 Morrow Street, Topeka, Indiana 46571
County:	LaGrange
SIC Code:	3061
Operation Permit No.:	087-14331-00031
Permit Reviewer:	Aida De Guzman

The Office of Air Quality (OAQ) has reviewed an application from Nishikawa Standard Company relating to the construction and operation of the following equipment to be used in the manufacture of automotive rubber weatherstripping products:

(a) One (1) SDM ED extrusion line, identified as emission unit X-033, with a maximum capacity of 1,289 pounds of rubber per hour, equipped with two (2) natural gas-fired microwave curing ovens, each has a heat input capacity of 0.143 million British Thermal Units per hour (mmBtu/hr), exhausting to vents PEV-E1 and PEV-E2; two (2) natural gas-fired hot air rubber curing ovens, each has a heat input capacity of 0.850 mmBtu/hr exhausting to stacks PEF-E1 and PEF-E2; and one wire metal system consisting of two (2) natural gas-fired burners, each has a heat input capacity of 0.375 mmBtu/hr and exhausting to stack PEF-E6.

(b) One (1) spray line identified as X-034, equipped with six (6) High Volume Low Pressure (HVLP) spray guns, using dry filters to control PM overspray emissions, exhausting to stack PEF-E3, and two (2) natural gas-fired coating cure ovens, each has a heat input capacity of 0.340 mmBtu/hr exhausting to stacks PEF-E4 and PEF-E5.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
PEV-E1	microwave curing ovens	35	1.33	NA	482
PEV-E2	microwave curing oven	35	1.33	NA	482
PEF-E1	hot air curing oven	35	1.5	4,400	644
PEF-E2	hot air curing ovens	35	1.5	4,400	644
PEF-E3	Spray Line, X-034	35	1.0	1,200	ambient

PEF-E4	coating cure oven	35	1.33	3,000	450
PEF-E5	coating cure oven	35	1.33	3,000	450
PEF-E6	wire metal system burners	35	1.0	250	260

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on May 7, 2001.

Emission Calculations

(a) Various Natural Gas-Fired Combustion Units: See Page 1 of 1 TSD Appendix A of this document for detailed emissions calculations.

(b) Spray Line, X-034:

Material	Density lb/gal	% VOC by Weight	% Solid Content	Spray Capacity per gun gram/min	Number of Guns	Transfer Efficiency	VOC tons/yr	PM tons/yr Uncontrolled	PM tons/yr Controlled
TW-017B	8.56	9.90	19.80	10.00	6.00	75	3.44	7.8	0.78

Note: The PM overspray emission will be controlled by dry filters (90 % efficiency).

	% Ethylene Glycol	Emissions (tons/year)
TW-017B	0.6	0.21

Methodology:
VOC Emissions = no. of guns * spray capacity, * 60 min/hr * 8760 hrs/yr * % VOC content * lb/454 grams * ton/2000 lb
PM Emissions = no. of guns * spray capacity * 60 min/hr * 8760 hrs/yr * lb/454 grams * (1-wt % VOC) * (1-Transfer Eff) * ton/2000 lb
HAPs Emissions = no. of guns * spray capacity , * 60 min/hr * 8760 hrs/yr * % HAP content * lb/454 grams * ton/2000 lb

(c) Rubber Extrusion:

	Rubber Throughput lbs/hour	VOC Emission Factor lbs/lb rubber	VOC Emissions tons/year	Combined HAPs Emission Factor lbs/lb rubber	Combined HAPs Emissions tons/year	PM Emission Factor lbs/lb rubber	PM Emissions tons/year
Extruders	1,289	3.9×10^{-5}	0.22	2.99×10^{-5}	0.17	2.67×10^{-8}	1.5×10^{-4}
Hot Air Curing	1,289	1.9×10^{-3}	10.7	9.76×10^{-4}	5.5	N/A	N/A
TOTAL			10.92		5.67		1.5×10^{-4}

SUMMARY OF EMISSION (TONS/YEAR)					
Pollutant	Natural Gas Combustion	Spray Line	Extruders	Hot Air Curing	TOTAL
PM	0.03	7.8	1.5×10^{-4}	0.0	7.83
PM10	0.11	7.8	1.5×10^{-4}	0.0	7.91
VOC	0.08	3.44	0.22	10.7	14.44
NOx	1.49	0.0	0.0	0.0	1.49
SO2	0.01	0.0	0.0	0.0	0.01
CO	1.25	0.0	0.0	0.0	1.25
HAPs	0.0	0.21	0.17	5.5	5.88

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	7.83
PM-10	7.91
SO_2	0.01
VOC	14.44
CO	1.25
NO_x	1.49

HAP's	Potential To Emit (tons/year)
1,1,1-Trichloroethane, 1,1-Dichloroethane,1,3-Butadiene, 2-Butanone	0.17
Ethylene Glycol	0.21
Acetophenone, aniline, benzene, biphenyl, bis (2-Ethylhexyl) Phtalate	5.5
TOTAL	5.88

Justification for Level of Approval

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM and PM10 are each greater than 5 tons per year but less than 25 tons per year, and volatile organic

compounds are at levels greater than 10 tons per year but less than 25 tons per year Therefore, the source is subject to 326 IAC 2-7-10.5(d), Minor Source Modification.

Proposed Modification Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Natural Gas Combustion	0.03	0.11	0.01	0.08	1.25	1.49	0.0
Spray Line	0.78	0.78	0.0	3.44	0.0	0.0	0.21
Extruders	1.5×10^{-4}	1.5×10^{-4}	0.0	0.22	0.0	0.0	0.17
Hor Air Curing	0.0	0.0	0.0	10.7	0.0	0.0	5.5
Total Emissions	0.81	0.89	0.01	14.44	1.25	1.49	5.88

County Attainment Status

The source is located in LaGrange County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	not determined

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. LaGrange County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) LaGrange County has been classified as attainment or unclassifiable for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	30.3
PM10	31.3
SO_2	1.10
VOC	<250 but >100
CO	16.0
NO_x	18.6
HAPs	133

(a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

Part 70 Permit Determination

The source's Part 70 permit (T087-7182-00031) was issued on April 12, 2001. This proposed modification (087-14331) is the first modification that will be made to the source after the Part 70 has been issued.

Federal Rule Applicability

(a) New Source Performance Standards (NSPS):
There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) National Emission Standards for Hazardous Air Pollutants (NESHAPs)
There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

(a) 326 IAC 2-6 (Emission Reporting)
The modification itself would not make the source subject to this rule, but since the source is a Part 70 source, emitting greater than 100 tons of VOC per year it is subject to 326 IAC 2-6 (Emission Reporting). The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

(b) 326 IAC 5-1 (Visible Emissions Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(1) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60,

Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

(a) 326 IAC 8-1-6 (General Reduction Requirements)
The spray line is not subject to this rule because its potential volatile organic compound emissions are less than 25 tons per year.

(b) 326 IAC 2-4.1-1 (New Source Toxics Control)
The proposed extrusion line X-033, spray line X-034 and hot air rubber curing process are not subject to this rule, because they do not emit hazardous air pollutant (HAPs) at major levels.

(c) 326 IAC 6-3-2 (Process Operations)

(1) Pursuant to 326 IAC 6-3, the PM emissions from the extruder line, X-033 shall be limited to 3.05 pounds per hour at process weight rate of 1,289 pounds per hour (0.64 tons/hour). This limit shall be determined using the following equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

(2) The spray line, X-034 PM overspray emissions shall be limited using the following equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

The dry filters shall be in operation at all times the spray line, X-034 is in operation, in order to comply with this limit.

(d) The proposed two (2) natural gas-fired microwave curing ovens, 2 hot air curing ovens, 2 wire metal system burners, and 2 coating cure ovens are not subject to 326 IAC 6-2-4 (PM Emissions Limit for Indirect Heating), because they are not sources of indirect heating.

Conclusion

The construction and operation of this source modification shall be subject to the conditions of the attached **Minor Source Modification 087-14331-00031.**

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

2 microwave curing ovens @ .143 mmBtu/hr
2 hot air curing ovens
@ .850 mmBtu/hr
2 wire metal sys. burners
@ .375 mmBtu/hr
2 coating cure ovens
@ .340 mmBtu/hr

Company Name: Nishikawa Standard Company
Address City IN Zip: 324 Morrow St.,
Plt ID: 087-14331-00031
Reviewer: Aida De Guzman
Date Application Received: May 7, 2001

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
3.4	29.8

Pollutant	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.03	0.11	0.01	1.49	0.08	1.25

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).